

CLAIMS

1. A method of cooling strip or wire products in which, subsequent to being annealed, the product (3) is cooled to a temperature of about 20-50°C beneath its oxidation temperature, where by winding the product (3) around a drum (1) immediately downstream of an annealing path so that the product (3) will lie in mutual juxtaposed turns whereafter the product after a number of turns, is unwound from the drum (1), **characterised in that** the product is wound onto the drum (1) through a number of turns such that said product (3) will be cooled to a desired temperature, and wherein the drum (1) is given a diameter that exceeds the diameter at which the product (3) will be influenced mechanically by plastic deformation.
2. A method according to Claim 1, **characterised** by placing the drum (1) in a closed housing (2) that includes a product inlet opening (4) and a product outlet opening (5) and by causing a shielding gas atmosphere to be maintained in the housing (2).
3. A method according to Claim 2, **characterised** by using argon, hydrogen gas or nitrogen gas or corresponding shielding gases as the shielding gas atmosphere.
4. A method according to any one of Claims 1-3, **characterised** by cooling the drum (1) with the aid of a forced convection effect with its surrounding atmosphere.
5. A method according to any one of Claims 1-4, **characterised** by cooling the drum (1) with the aid of an external coolant which is caused to cool the inside (7) of the drum (1).
6. A method according to any one of Claims 1-5, **characterised** by constructing the drum (1) from a material that has good thermal conductivity, such as metallic material.
7. A method according to any one of the preceding Claims, **characterised** by driving the drum (1) with the aid of a drive motor.

8. An arrangement for cooling strip or wire material products where the product is cooled to a temperature of about 20-50°C beneath the oxidation temperature of said product after having been annealed, **characterised** in that the product (3) is wound onto a drum (1) immediately downstream of an annealing path such that the turns of the product (3) will be mutually juxtaposed, wherein the product is unwound from the drum (1) after having been wound onto the drum through a number of turns, wherein the number of turns on the drum (1) is such as to cool the product (3) to a desired temperature, and wherein the drum (1) has a diameter which exceeds the diameter at which the product (3) is influenced mechanically by plastic deformation.

9. An arrangement according to Claim 8, **characterised** in that the drum (1) is located in a closed housing (2) that has an inlet opening (4) and an outlet opening (5) for the product (3); and in that the housing (2) contains and maintains a shielding gas atmosphere.

10. An arrangement according to Claim 9, **characterised** in that the shielding gas atmosphere consists of argon, hydrogen gas or nitrogen gas or a corresponding shielding gas.

11. An arrangement according to any one of Claims 8 to 10 inclusive, **characterised** in that the drum (1) is cooled with the aid of a forced convection effect from its surrounding atmosphere.

12. An arrangement according to any one of Claims 8 to 11 inclusive, **characterised** in that the drum (1) is cooled with the aid of an external coolant which functions to cool the inside (7) of the drum (1).

13. An arrangement according to Claim 12, **characterised** in that the drum (1) is made of a material that has good thermal conductivity, such as metallic material.

14. An arrangement according to any one of Claims 8 to 13 inclusive, **characterised** in that the drum (1) is motor-driven.